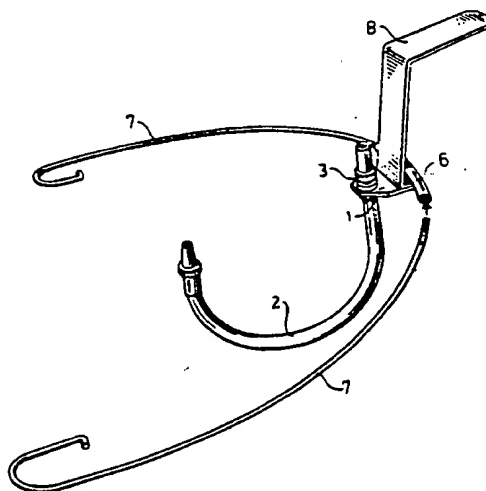


## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<b>(21) International Application Number:</b> PCT/SE85/00146 <b>(22) International Filing Date:</b> 29 March 1985 (29.03.85) <b>(31) Priority Application Number:</b> 8401786-2 <b>(32) Priority Date:</b> 30 March 1984 (30.03.84) <b>(33) Priority Country:</b> SE  <b>(71)(72) Applicant and Inventor:</b> LEDIN-BONEVIK, Birgit- ta, Barbro, Maria [SE/SE]; Vintervägen 9, S-542 00 Mariestad (SE).  <b>(74) Agents:</b> AXELSSON, Rolf et al.; Kransell & Wennborg AB, Sandhamnsgatan 42, S-115 28 Stockholm (SE).  <b>(81) Designated States:</b> AT (European patent), BE (Euro- pean patent), CH (European patent), DE (European patent), DK, FI, FR (European patent), GB (Euro- pean patent), IT (European patent), LU (European patent), NL (European patent), NO, SE (European patent), US.		<b>Published</b> <i>With international search report.</i>

**(54) Title:** A COLON IRRIGATOR**(57) Abstract**

A device intended to be attached to a toilet basin to permit irrigation of the colon, comprising a tube (2) which is carried by a holder (1) and the one end of which is intended to be connected to a water container located at a higher level than the toilet stool and the other end of which is intended to be connected to a rectum catheter via a check valve. The holder (1) is provided with two sprung attachment arms (7) which project from the holder (1) in two mutually opposite directions and in a common plane. The arms are arranged, when the holder is inserted into the cavity of a toilet basin, to fix the holder (1) in a given position at the rear part of the toilet basin as a result of the sprung abutment of the arms (7) against the basin walls, so that the rectum catheter extends substantially vertically upwards. The attachment arms suitably comprise arcuate wire or rod (7) or bands, which are intended to abut the basin walls at a location immediately beneath the outlet for flushing water.

A colon irrigator

The present invention relates to a device intended for attachment to a toilet basin to permit rinsing of the colon with liquid (enema), the device comprising a tube which is carried by the holder and one  
5 end of which is intended for connection to a water container located at a higher level than the toilet basin or to another water supply, and the other end of which is intended for connection, suitably via a check valve, to a rectum catheter (enema catheter), the holder being  
10 arranged to be fixed in a given position in the cavity of a toilet basin with the rectum catheter extending substantially vertically upwards with the use of spring attachment arms intended for co-action with the toilet basin.

15 In hospitals and like nursing establishments an enema or colon irrigation is normally given with the patient lying on a bed or some suitable horizontal surface. The patient is then moved to a toilet, where the water introduced into the bowel is allowed to run  
20 out therefrom. Because the patient has to be moved from the bed to the toilet, the procedure often becomes unsanitary and causes discomfort both to the patient and to the nursing personnel. The fact that water is introduced into the bowel with the patient in a recumbent  
25 position may also cause discomfort to the patient, due to a too large quantity of water being administered. It is also difficult for a person to administer an enema in this way by himself/herself, without assistance.

In the Swedish lay-open print 315 553 there is  
30 described a colon irrigator which can be used while seated on a toilet seat. To this end the device includes an auxiliary seat which is to be placed on the toilet basin and which has mounted thereon a supply tube for rinsing or treatment liquid, and a rectum  
35 catheter. This device has the advantage of rendering

When using a device according to the invention the patient thus sits comfortably in a normal fashion on the seat belonging to the toilet basin, since the whole of the device is located at a lower position within the basin. The patient is therefore able to sit firmly on the seat and be perfectly relaxed.

The attachment arms preferably have the form of arcuate wires or bands arranged to abut the basin walls immediately beneath the flush outlet. The arms will therefore lie in a relatively protected position and will not block the toilet.

The attachment arms are suitably constructed to enable them to be readily removed from the holder, which, in the in-use position, may have the form of a near flat plate provided with holes in which the aforesaid tubular piece can be detachably secured. Among other things, this enables the device to be readily dismantled for sterilization in an autoclave, and also enables it to be packed into a very small package for transport purposes.

In order to prevent the rectum catheter from being displaced laterally, the plate and the aforesaid tube are preferably provided with co-acting means which enable the tube to be held firmly in a given position of rotation relative to the plate. The holder is also suitably provided with means which co-act with the upper edge of the toilet basin to prevent the holder from sliding down thereinto.

The invention will now be described in more detail with reference to an illustrative embodiment thereof shown in the accompanying drawing in which

Figure 1 is a perspective view of a device according to the invention; and

Figure 2 is a side view of the device when mounted to a toilet basin.

As will be seen from the drawing, the device includes a holder in the form of a plate 1 having a hole in which there is secured a U-shaped tube 2 with the

for example, be hung on a wall behind the toilet basin. The other end of the tube 2 is connected, via a check valve, with a rectum catheter 11, which as a result of the shape of the tube 2 extends substantially vertically upwards.

The device illustrated in Figure 2 can be used by a person for colon irrigation without requiring the assistance of another person. The person is thus able to sit positively and firmly on the normal seat of the toilet basin, and irrigation can be effected with the person in a sitting position, without needing to move.

All components are suitable manufactured from a material resistant to corrosion, suitably stainless steel, which enables the components to be sterilized in an autoclave. The device can herefor be readily and quickly dismantled and requires the minimum of space for packaging or storage purposes. As beforementioned, this enables the device to be taken on journeys without difficulty. Another important advantage afforded by the device is that it is compatible to all types of toilet basins.

The invention is not restricted to the illustrated embodiment and many modifications can be made. This applies, for example, to the precise form of the holder and the spring arms respectively. For example, the arms may have the form of bands or the like, instead of wire or rod, wherewith each arm may also comprise a plurality of mutually parallel branches. For the purpose of readily inserting the device into the cavity of a toilet basin and removing the device therefrom, however, it is important that the arms are sprung, so that the device can be held firmly in position with the aid of the spring force thus provided.

to the plate.

6. A device according to any one of Claims 1-5, characterized in that the holder (1) is provided with means which co-act with the upper edge of the toilet  
5 basin to prevent the holder from sliding down thereinto.

7. A device according to any one of Claims 1-6, characterized in that all components of the device are made of a stainless material capable of being sterilized in an autoclave.

# INTERNATIONAL SEARCH REPORT

International Application No PCT/SE85/00146

<b>I. CLASSIFICATION OF SUBJECT MATTER</b> (if several classification symbols apply, indicate all) * According to International Patent Classification (IPC) or to both National Classification and IPC 4 <div style="margin-left: 40px;">A 61 M 7/00</div>								
<b>II. FIELDS SEARCHED</b> <div style="text-align: center; margin-top: 10px;">Minimum Documentation Searched ?</div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 25%;">Classification System</th> <th style="width: 75%;">Classification Symbols</th> </tr> <tr> <td style="padding: 5px;">IPC</td> <td style="padding: 5px;">A 47 K 7/08; A 61 H 35/00; A 61 M 3/00, 7/00-04, 9/00; E 03 D 9/00, 08</td> </tr> <tr> <td style="padding: 5px;">US C1</td> <td style="padding: 5px;">4:7, 420-420.5, 443-448; 128:224-229, 239-246; .../...</td> </tr> </table> <div style="text-align: center; margin-top: 10px; font-size: small;">Documentation Searched other than Minimum Documentation to the extent that such Documents are included in the Fields Searched *</div>			Classification System	Classification Symbols	IPC	A 47 K 7/08; A 61 H 35/00; A 61 M 3/00, 7/00-04, 9/00; E 03 D 9/00, 08	US C1	4:7, 420-420.5, 443-448; 128:224-229, 239-246; .../...
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<div style="text-align: center;">SE, NO, DK, FI classes as above</div>								
<b>III. DOCUMENTS CONSIDERED TO BE RELEVANT *</b>								
Category *	Citation of Document, <sup>11</sup> with indication, where appropriate, of the relevant passages <sup>12</sup>	Relevant to Claim No. <sup>13</sup>						
A	DE, A, 2 106 014 (WOYCZIECHOWSKI) 17 August 1972							
A	CH, A, 418 997 (RAFAEL D'AURIA) 28 February 1967							
A	US, A, 1 992 132 (C C SPICHER) 19 February 1935							
A	US, A, 2 007 069 (W M BERG) 2 July 1935							
A	US, A, 2 705 495 (M VRANA ET AL) 5 April 1955							
A	US, A, 3 042 039 (E J DAHLSTRÖM) 3 July 1962							
<div style="display: flex; justify-content: space-between; font-size: x-small;"> <div style="width: 45%;"> <p>* Special categories of cited documents: <sup>10</sup></p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </div> <div style="width: 45%;"> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"&amp;" document member of the same patent family</p> </div> </div>								
<b>IV. CERTIFICATION</b>								
Date of the Actual Completion of the International Search <div style="margin-top: 10px;">1985-06-17</div>	Date of Mailing of this International Search Report <div style="margin-top: 10px; text-align: center;">850625</div>							
International Searching Authority <div style="margin-top: 10px;">Swedish Patent Office</div>	Signature of Authorized Officer <div style="margin-top: 10px; text-align: center;">            Folke Svensson         </div>							